

CLAIMS:

1. A data processing device enabling a user to input characters, the device comprising a touch-sensitive member arranged to function as a virtual keyboard, said member including at least one touch sensor for detecting touched zones on said member, wherein the device comprises

5 key allocation means for allocating at least two reference keys of the virtual keyboard to respective zones on said member in response to said detection of touched zones.

2. The device of claim 1, wherein said key allocation means is further arranged to allocate on the touch-sensitive member other keys of the virtual keyboard upon allocating
10 said reference keys.

3. The device of claim 1, wherein the at least one touch sensor is further arranged to determine a parameter of a respective one of the touched zones, said key allocation means being arranged to allocate the reference keys having a size and/or form on said touch-
15 sensitive member depending on said parameter of the respective detected zone.

4. The device of claims 2 and 3, wherein said key allocation means is arranged to allocate said other keys having a size and/or form on said touch-sensitive member depending on said parameter of the respective detected zone, or said size and/or form of the allocated
20 reference keys.

5. The device of claim 1, wherein said key allocation means is arranged to allocate four or eight reference keys upon detecting four fingers of the user's left hand and/or four fingers of the user's right hand touching the touch-sensitive member.

25 6. The device of claim 1, wherein said virtual keyboard has a QWERTY-type layout.

7. The device of claim 2, wherein the virtual keyboard has at least two groups of keys, each group of keys including at least one reference key being allocated to said detected zones by said key allocation means, and other keys of the group of keys being allocated upon allocating at least one reference key of said group of keys.

8. The device of claim 7, wherein said groups of keys may have a different orientation on the touch-sensitive member when the keys of said groups are allocated.

9. The device of claim 1, further comprising at least one pressure sensor for sensing a force of at least one finger on the touch-sensitive member.

10. The device of claim 9, wherein the at least one pressure sensor is arranged to identify a finger causing a force on the touch-sensitive member higher than other fingers when more than one finger touches said member.

11. The device of claim 10, further comprising key stroke recognition means arranged to recognize a key stroke by analyzing a relative position of the zone touched with the higher force with respect to a position of at least one other zone touched with a lower force.

12. The device of claim 1 and 10 or 11, wherein said zones touched by said other fingers correspond to said reference keys.

13. The device of claim 1, further comprising key correction means for correcting a location of at least one reference key by repeatedly allocating at least one reference key.

14. The device of claim 12 and 13, wherein said key correction means functions upon detecting a substantial change of position of at least one of said other fingers.

15. The device of any one of the preceding claims, wherein said touch-sensitive member further comprises display means arranged to display a representation of at least one reference key and/or other key of the virtual keyboard.

16. A method of enabling a user to input characters, the method comprising a step of detecting touched zones on a touch-sensitive member arranged to function as a virtual keyboard, wherein the method comprises

5 a step of allocating at least two reference keys of the virtual keyboard to respective zones on said member in response to said detection of touched zones.

17. The method of claim 16, further comprising a step of allocating on the touch-sensitive member other keys of the virtual keyboard upon allocating said reference keys.

10 18. The method of claim 17, further comprising a step of sensing a force of at least one finger on the touch-sensitive member, and

a step of identifying a finger causing a force on the touch-sensitive member higher than other fingers when more than one finger touches said member, and

15 a step of recognizing a key stroke by analyzing a relative position of the zone touched with the higher force with respect to a position of at least one other zone touched with a lower force.

19. A computer program product enabling a programmable device, when
20 executing said computer program product, to function as the device as defined in claim 1.